

**I. AMENDMENTS****In the Specification:**

Please replace the paragraph beginning at page 16, line 20, and ending at page 16, line 20, with the following rewritten paragraph:

-- FIG. 2 presents nucleotide sequence (SEQ ID NO:6) and deduced amino acid sequence (SEQ ID NO:7) of hpa cDNA. A single nucleotide difference at position 799 (A to T) between the EST (Expressed Sequence Tag) and the PCR amplified cDNA (reverse transcribed RNA) and the resulting amino acid substitution (Tyr to Phe) are indicated above and below the substituted unit, respectively. Cysteine residues and the poly adenylation consensus sequence are underlined. The asterisk denotes the stop codon TGA. --

Please add on page 19, line 4, the following paragraphs:

-- The recombinant protein may be useful in obtaining pure heparanase, which in turn may be useful in eliciting anti-heparanase antibodies, either poly or monoclonal antibodies and as a screening active ingredient in an anti-heparanase inhibitors or drugs screening assay or system.

According to still further features in the described preferred embodiments the polynucleotide sequence encodes a polypeptide having heparanase activity, which shares at least 60% homology, preferably at least 70% homology, more preferably at least 80% homology, most preferably at least 90% homology with SEQ ID NO: 1. --